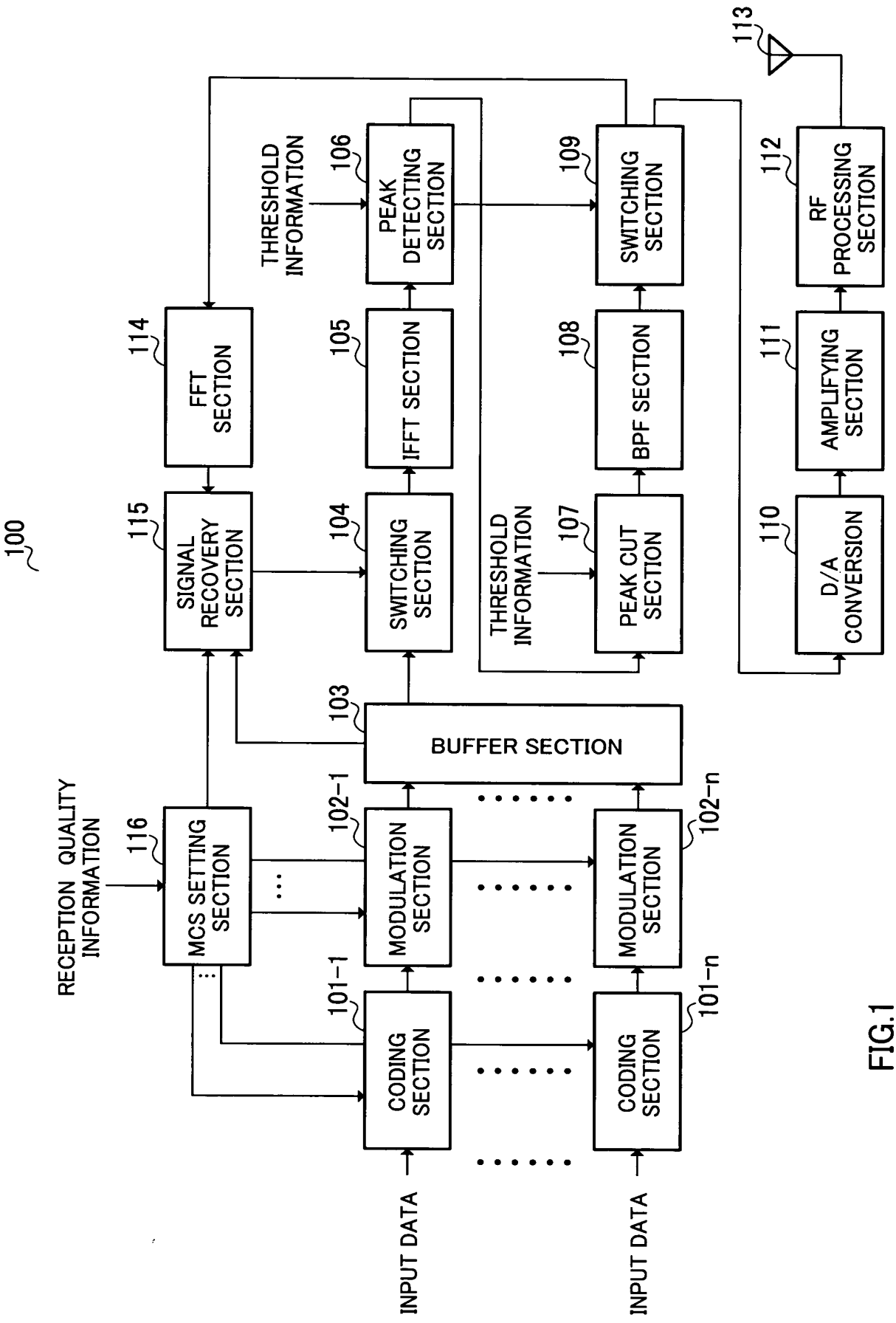
100
RECEPTION QUALITY INFORMATION
116
MCS SETTING SECTION
114
FFT SECTION
115
SIGNAL RECOVERY SECTION
INPUT DATA
101-1
CODING SECTION
102-1
MODULATION SECTION
103
BUFFER SECTION
104
SWITCHING SECTION
105
IFFT SECTION
THRESHOLD INFORMATION
106
PEAK DETECTING SECTION
INPUT DATA
101-n
CODING SECTION
102-n
MODULATION SECTION
THRESHOLD INFORMATION
107
PEAK CUT SECTION
108
BPF SECTION
109
SWITCHING SECTION
110
D/A CONVERSION
111
AMPLIFYING SECTION
112
RF PROCESSING SECTION
113

FIG.1

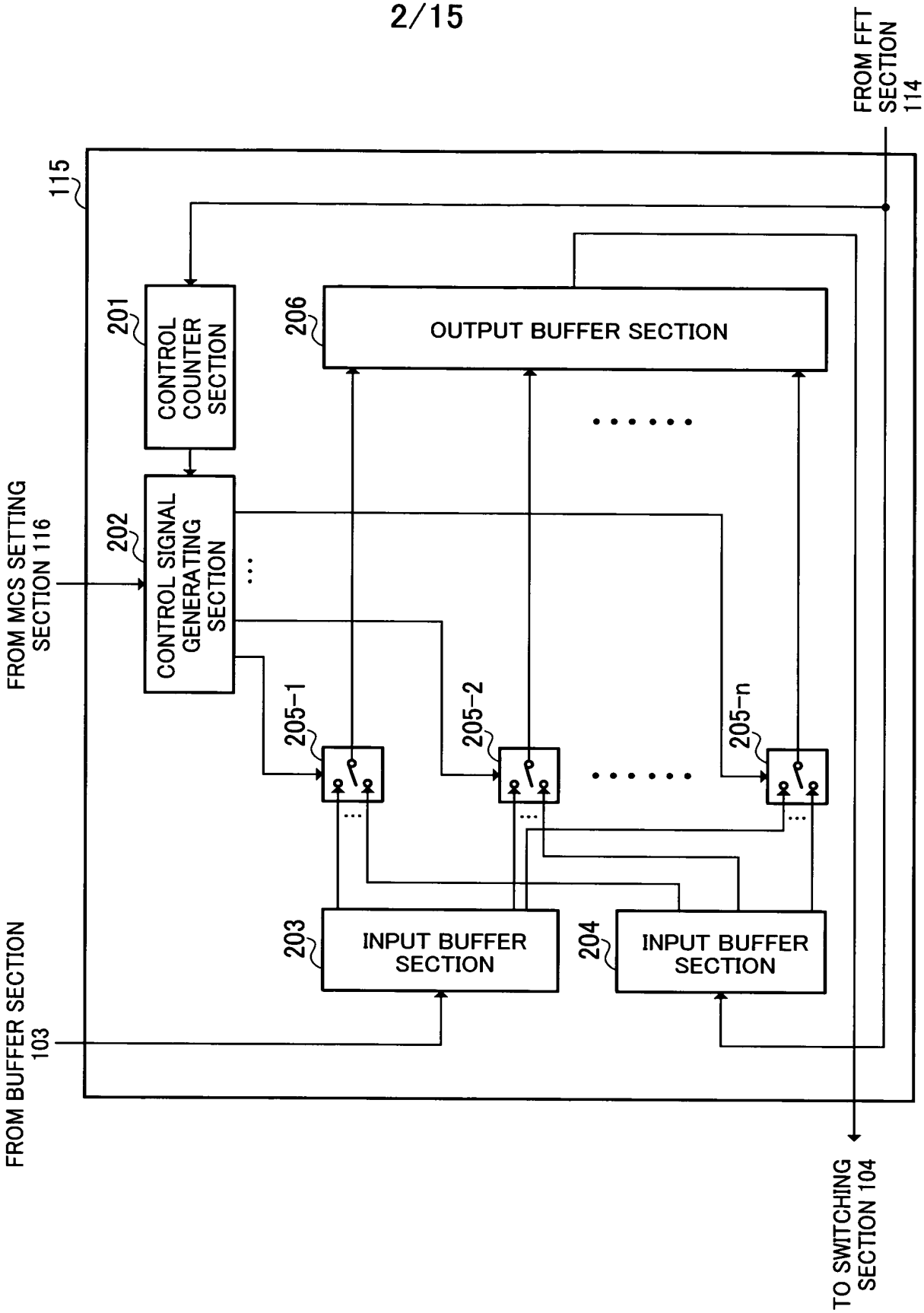
FROM FFT SECTION 114
115
201
CONTROL COUNTER SECTION
206
OUTPUT BUFFER SECTION
FROM MCS SETTING SECTION 116
202
CONTROL SIGNAL GENERATING SECTION
205-1
205-2
205-n
203
INPUT BUFFER SECTION
204
INPUT BUFFER SECTION
FROM BUFFER SECTION 103
TO SWITCHING SECTION 104

FIG.2

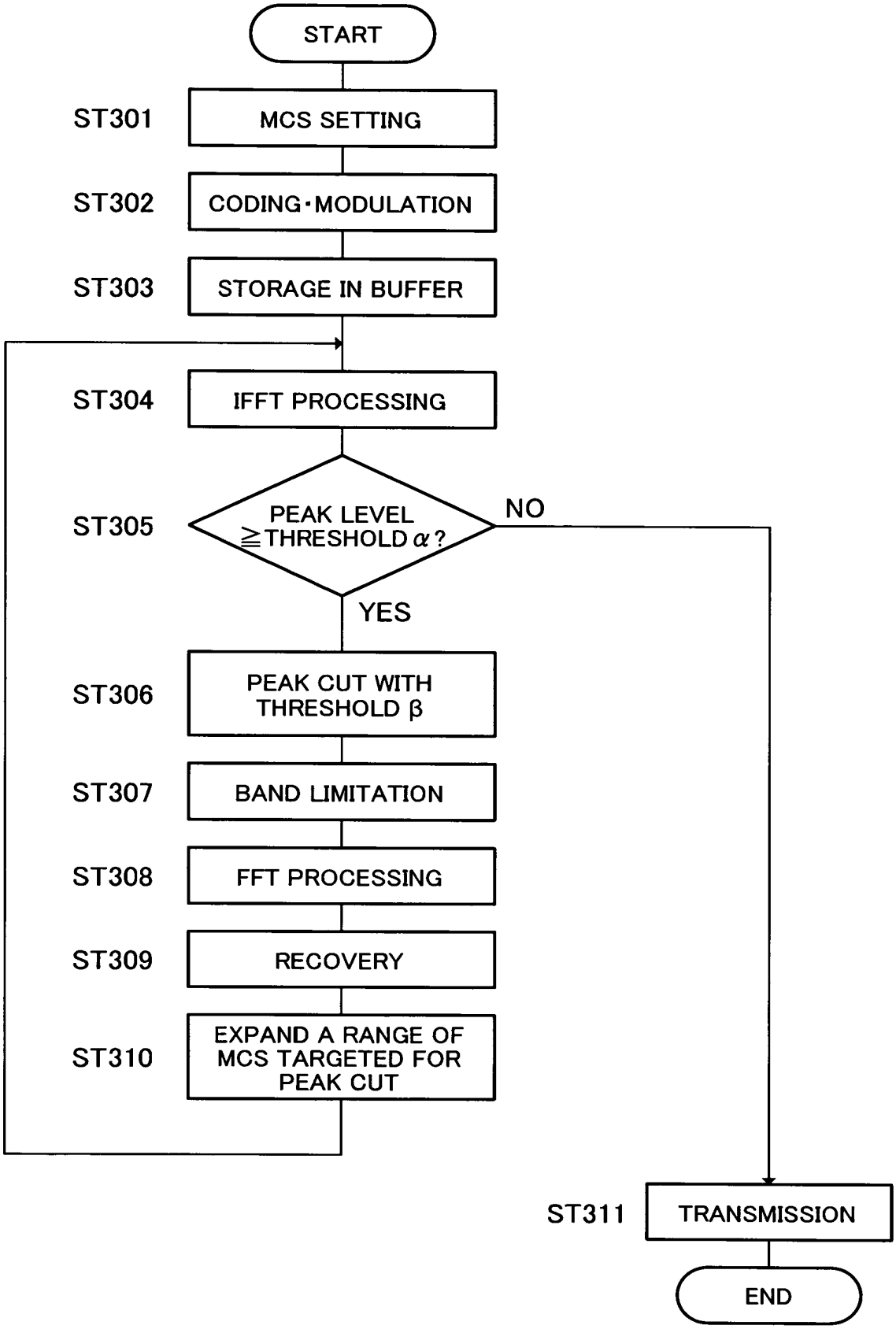
START
ST301
MCS SETTING
ST302
CODING・MODULATION
ST303
STORAGE IN BUFFER
ST304
IFFT PROCESSING
ST305
PEAK LEVEL ≧THRESHOLD α ?
NO
YES
ST306
PEAK CUT WITH THRESHOLD β
ST307
BAND LIMITATION
ST308
FFT PROCESSING
ST309
RECOVERY
ST310
EXPAND A RANGE OF MCS TARGETED FOR PEAK CUT
ST311
TRANSMISSION
END

FIG.3

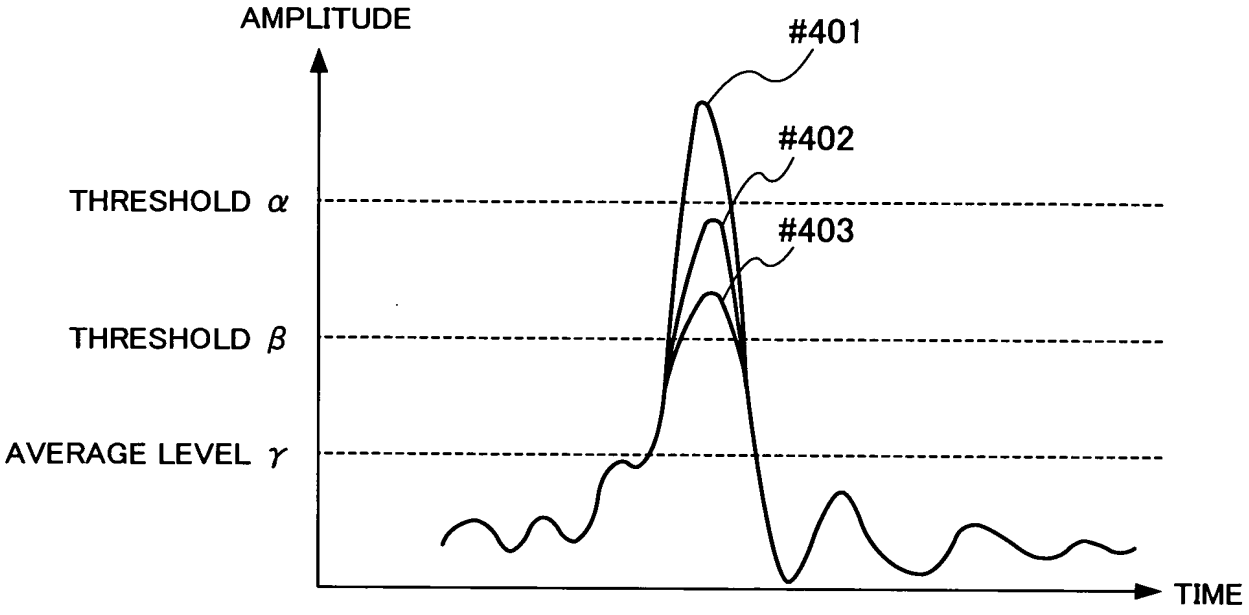
AMPLITUDE
#401
#402
#403
THRESHOLD α
THRESHOLD β
AVERAGE LEVEL γ
TIME

FIG.4

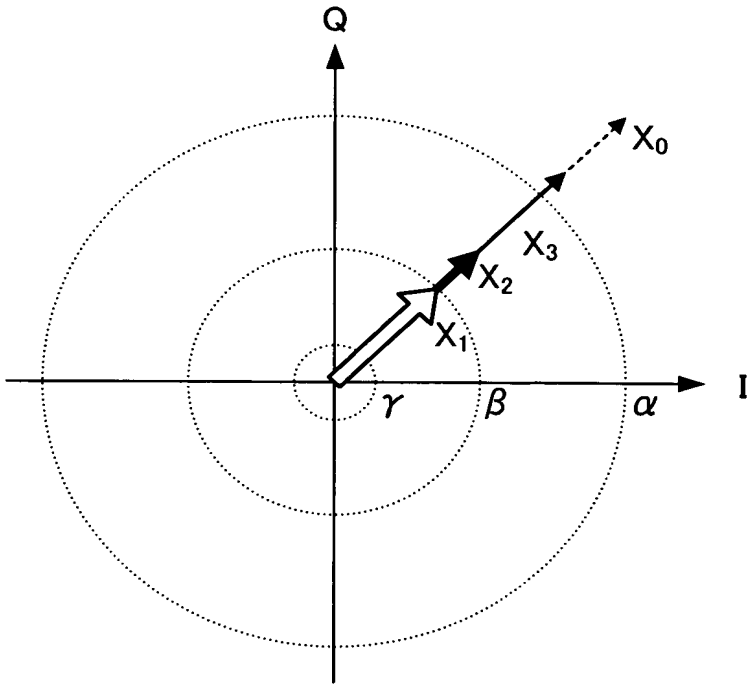
Q
X0
X3
X2
X1
I
γ
β
α

FIG.5

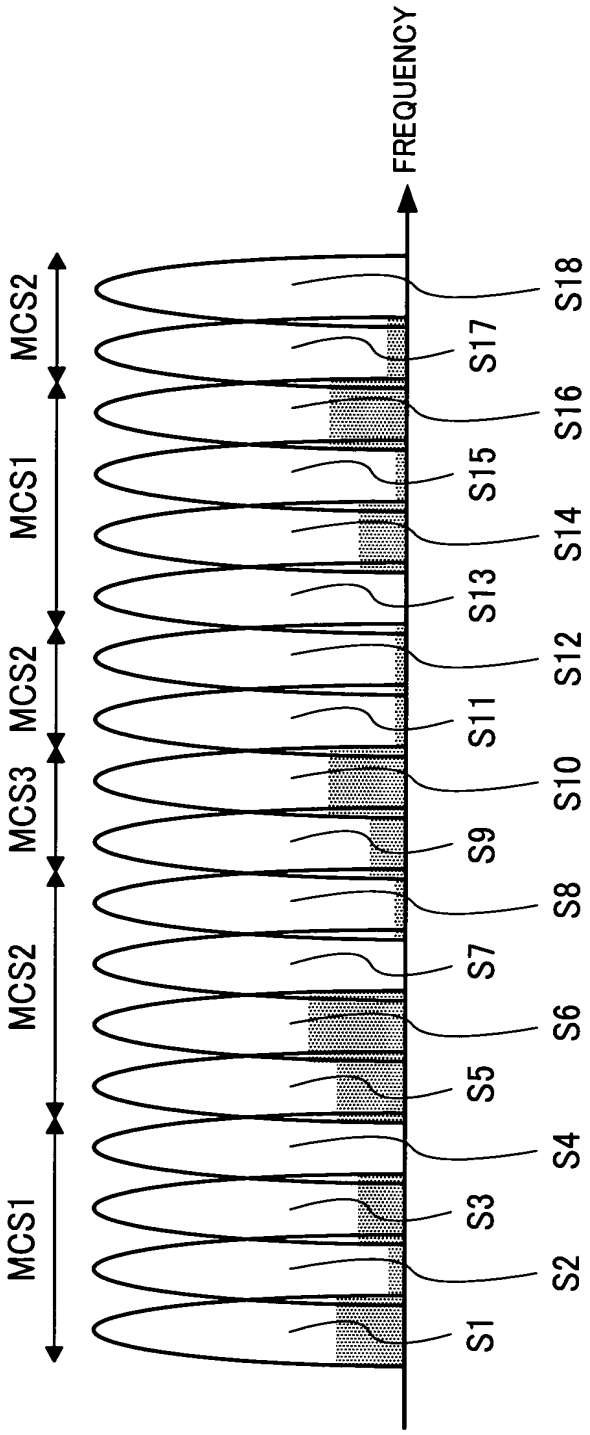
FREQUENCY
MCS1
MCS2
MCS3
MCS2
MCS1
MCS2
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18

FIG.6

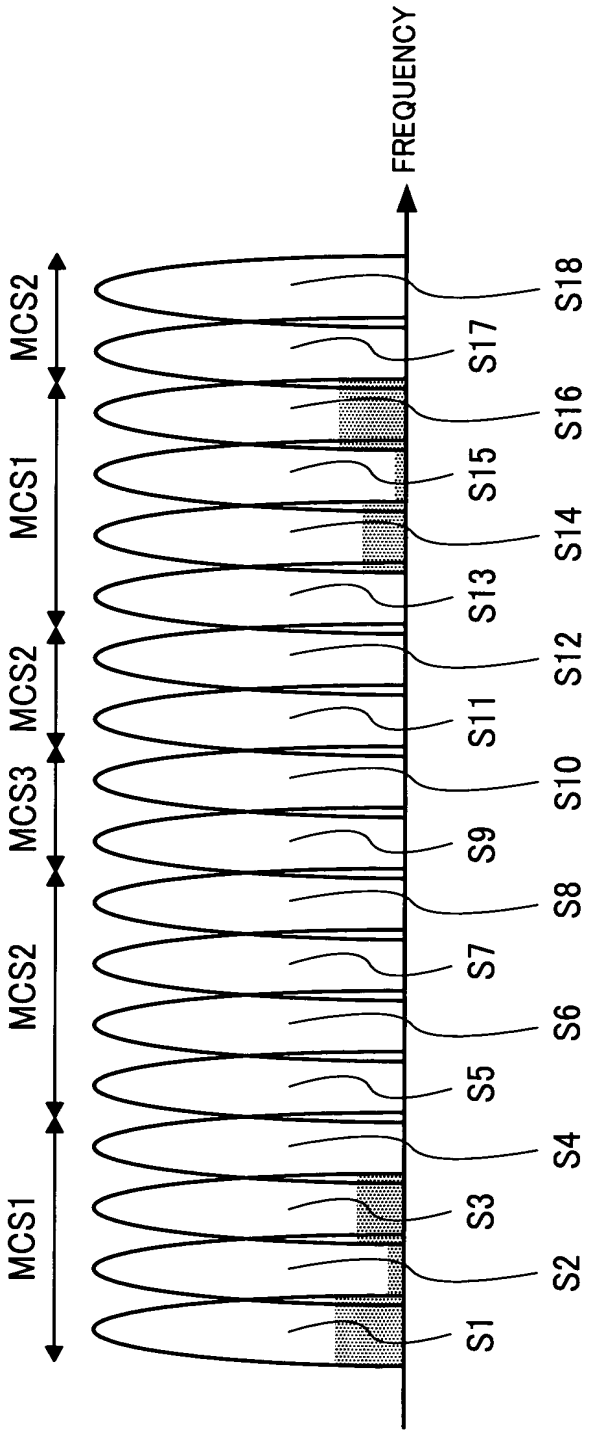
FREQUENCY
MCS1
MCS2
MCS3
MCS2
MCS1
MCS2
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18

FIG.7

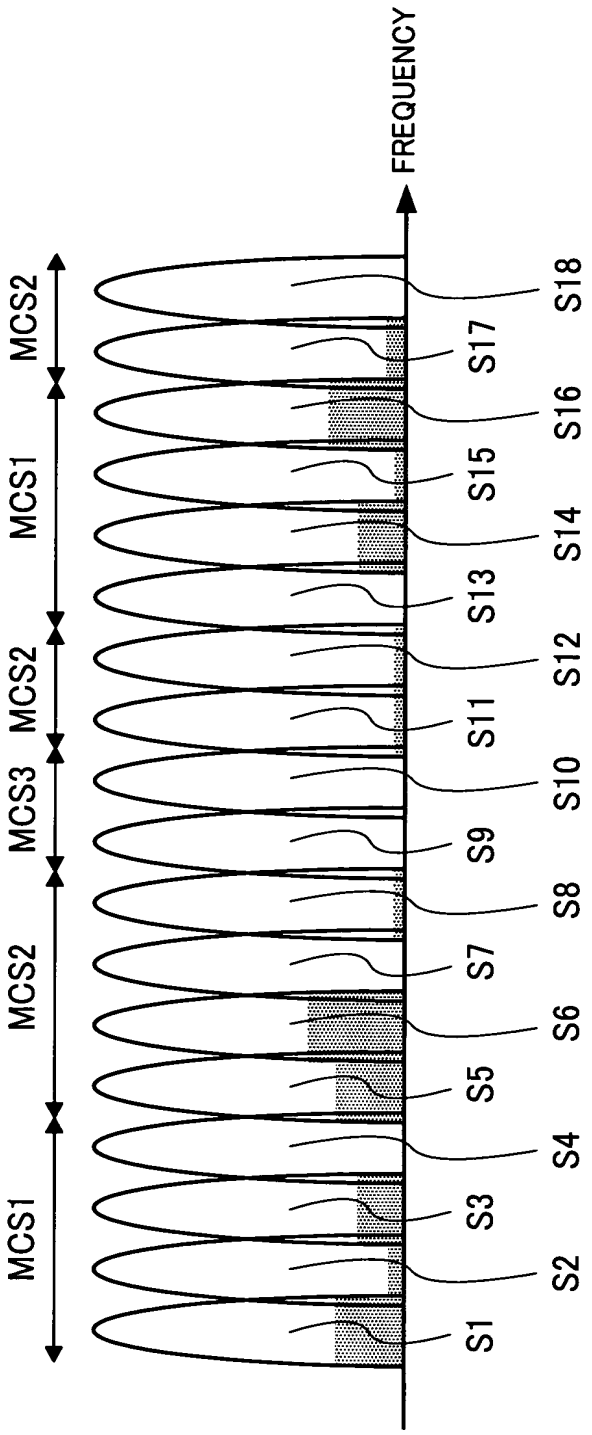
FREQUENCY
MCS1
MCS2
MCS3
MCS2
MCS1
MCS2
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18

FIG.8

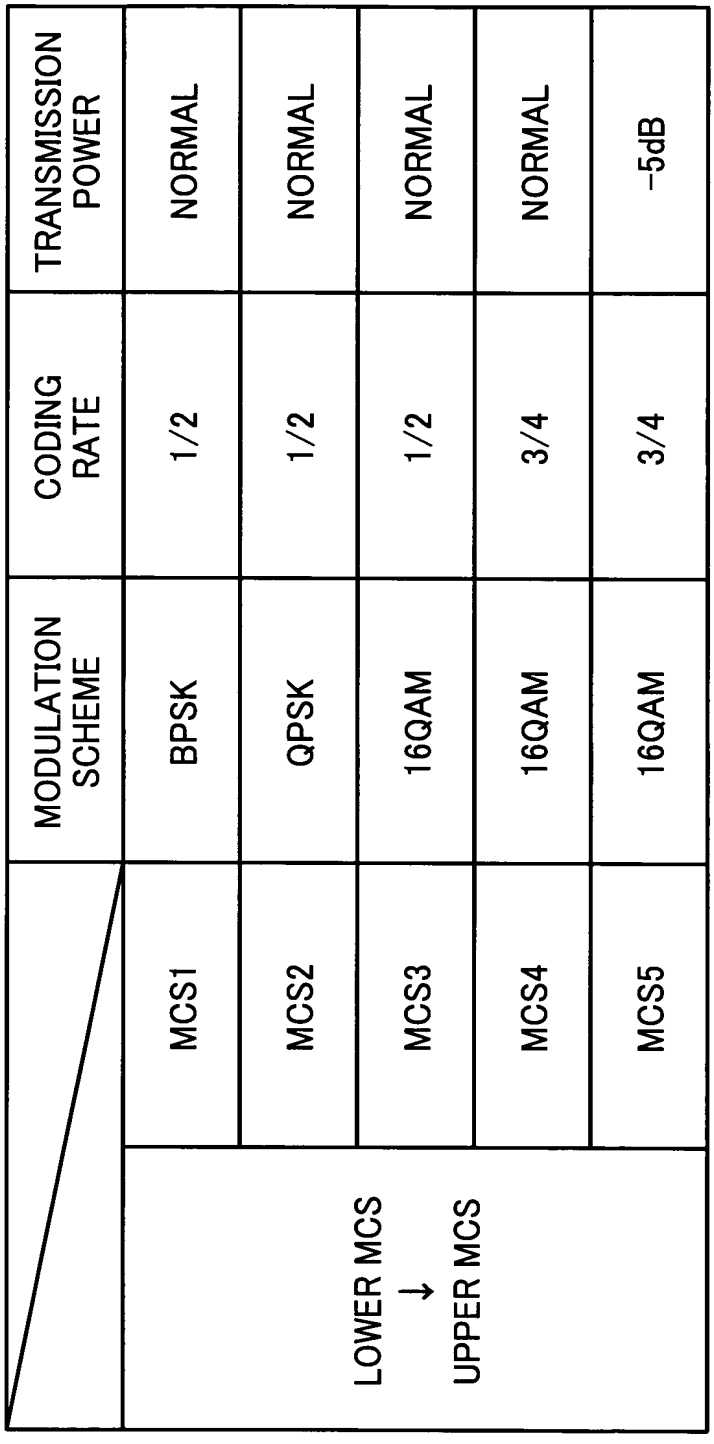
LOWER MCS
↓
UPPER MCS
MODULATION SCHEME
CODING RATE
TRANSMISSION POWER
MCS1
BPSK
1/2
NORMAL
MCS2
QPSK
1/2
NORMAL
MCS3
16QAM
1/2
NORMAL
MCS4
16QAM
3/4
NORMAL
MCS5
16QAM
3/4
−5dB

FIG.9

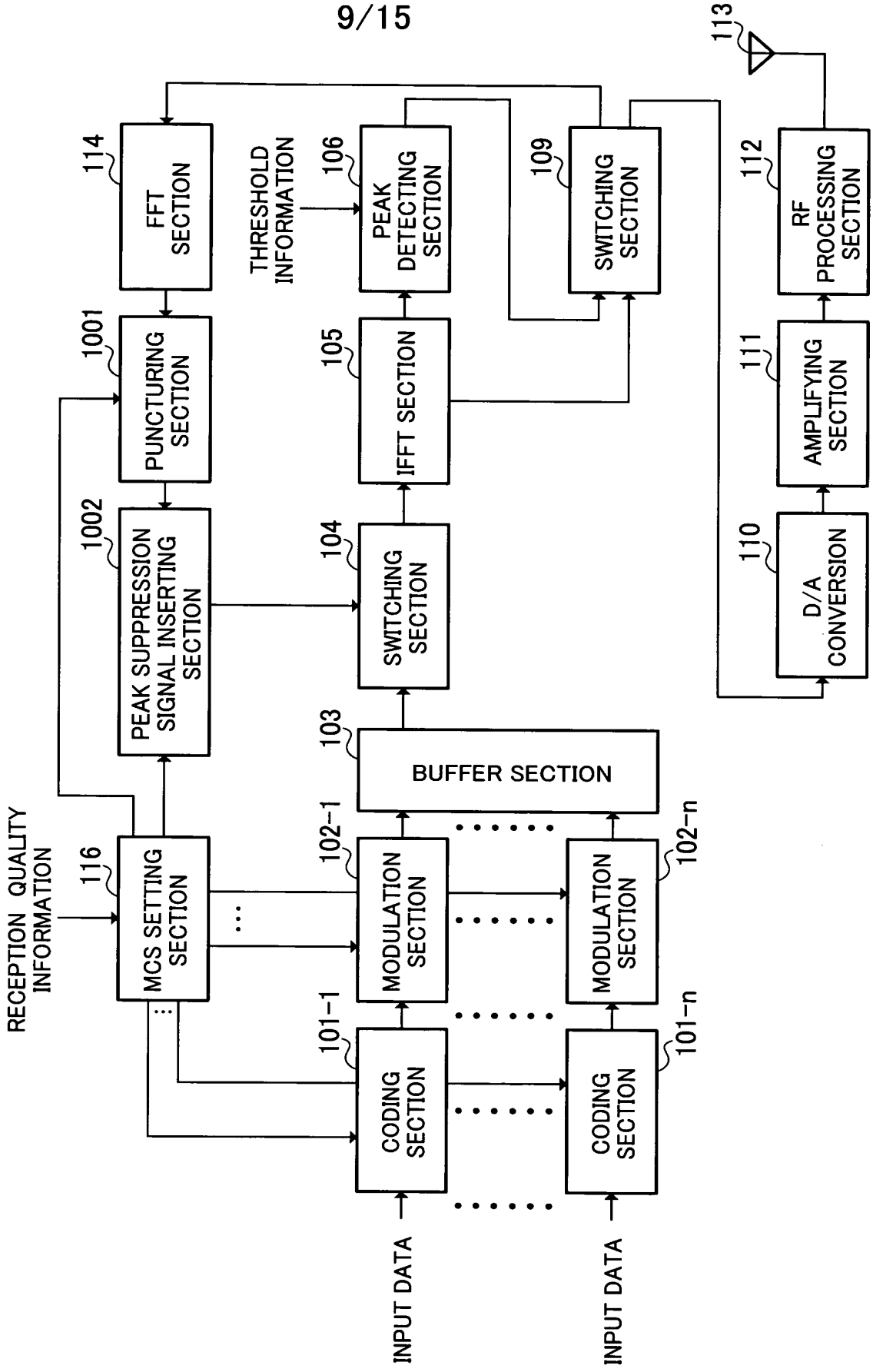
1000
RECEPTION QUALITY INFORMATION
116
MCS SETTING SECTION
1001
PUNCTURING SECTION
1002
PEAK SUPPRESSION SIGNAL INSERTING SECTION
114
FFT SECTION
THRESHOLD INFORMATION
106
PEAK DETECTING SECTION
105
IFFT SECTION
104
SWITCHING SECTION
103
BUFFER SECTION
102-1
MODULATION SECTION
102-n
MODULATION SECTION
101-1
CODING SECTION
101-n
CODING SECTION
INPUT DATA
INPUT DATA
109
SWITCHING SECTION
110
D/A CONVERSION
111
AMPLIFYING SECTION
112
RF PROCESSING SECTION
113

FIG.10

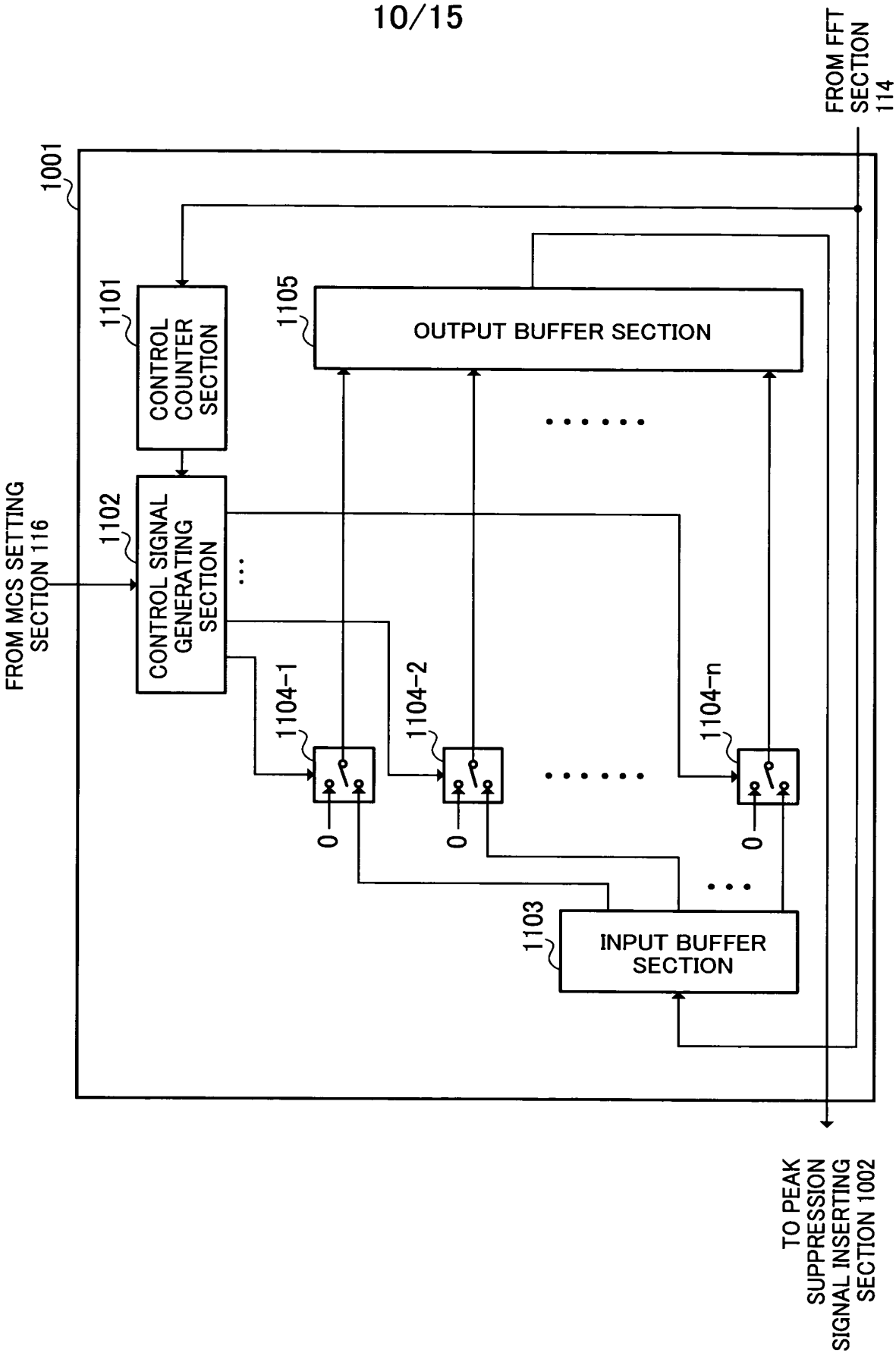
FROM FFT SECTION 114
1001
1101
CONTROL COUNTER SECTION
1105
OUTPUT BUFFER SECTION
FROM MCS SETTING SECTION 116
1102
CONTROL SIGNAL GENERATING SECTION
1104-1
1104-2
1104-n
0
0
0
1103
INPUT BUFFER SECTION
TO PEAK SUPPRESSION SIGNAL INSERTING SECTION 1002

FIG.11

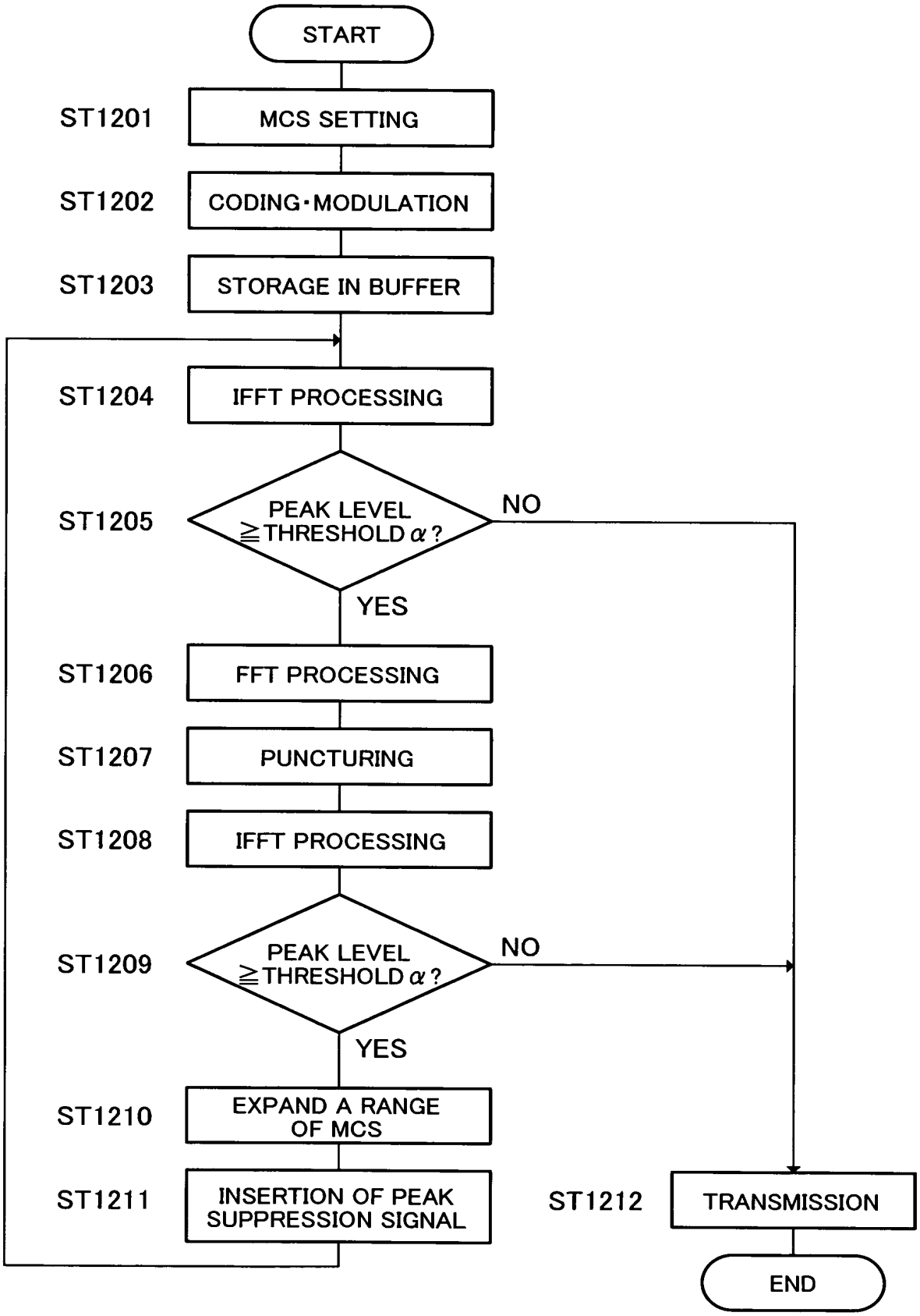
START
ST1201
MCS SETTING
ST1202
CODING·MODULATION
ST1203
STORAGE IN BUFFER
ST1204
IFFT PROCESSING
ST1205
PEAK LEVEL ≧THRESHOLD α ?
NO
YES
ST1206
FFT PROCESSING
ST1207
PUNCTURING
ST1208
IFFT PROCESSING
ST1209
PEAK LEVEL ≧THRESHOLD α ?
NO
YES
ST1210
EXPAND A RANGE OF MCS
ST1211
INSERTION OF PEAK SUPPRESSION SIGNAL
ST1212
TRANSMISSION
END

FIG.12

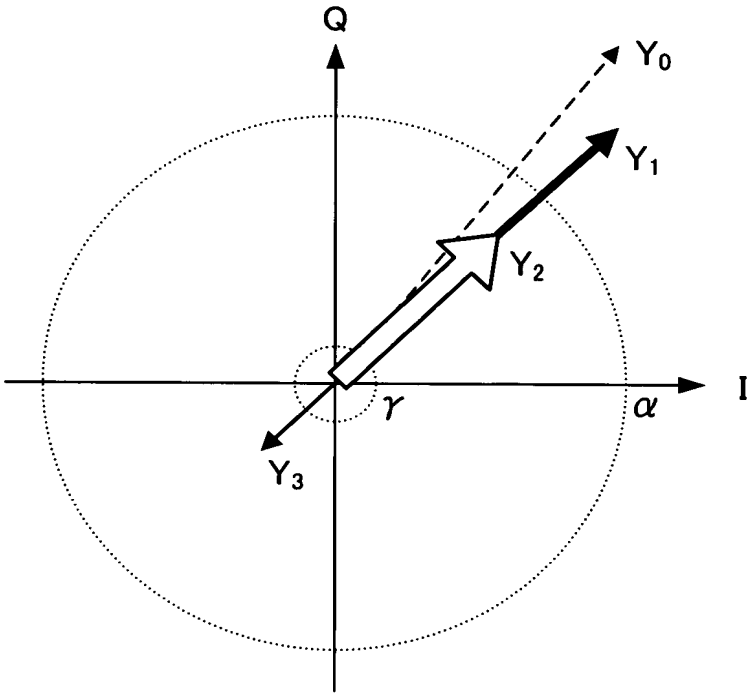

FIG.13

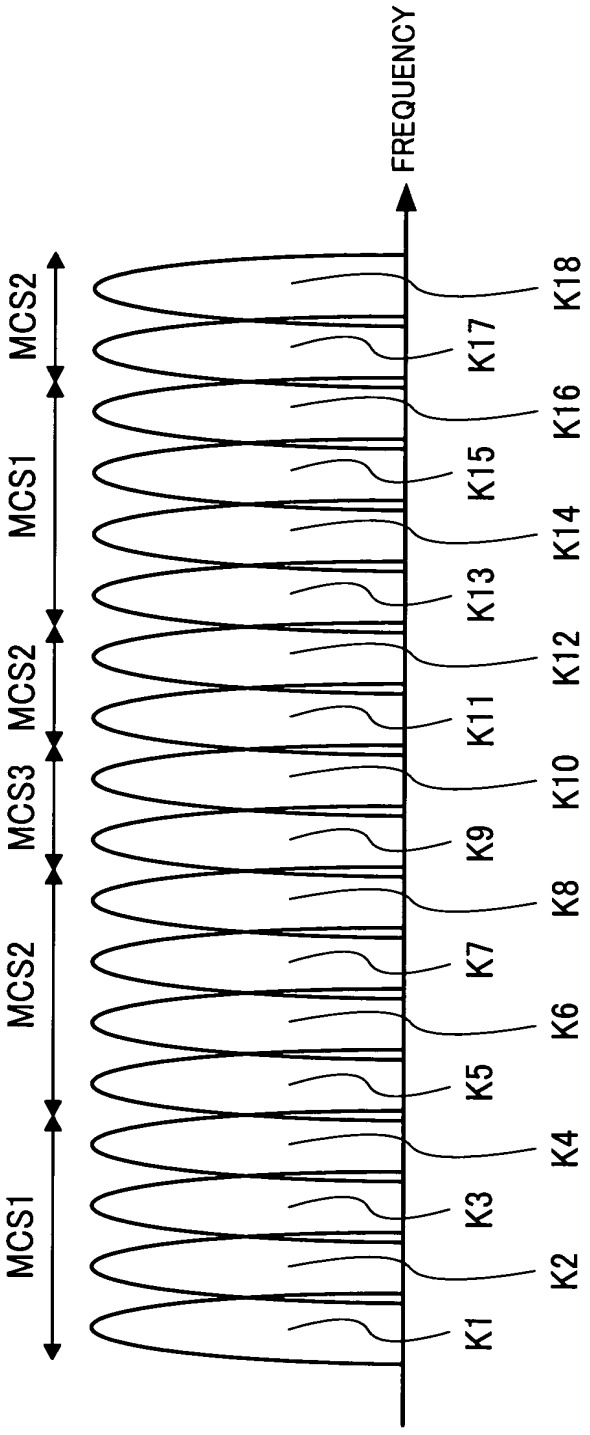
FREQUENCY
MCS1
MCS2
MCS3
MCS2
MCS1
MCS2
K1
K2
K3
K4
K5
K6
K7
K8
K9
K10
K11
K12
K13
K14
K15
K16
K17
K18

FIG.14

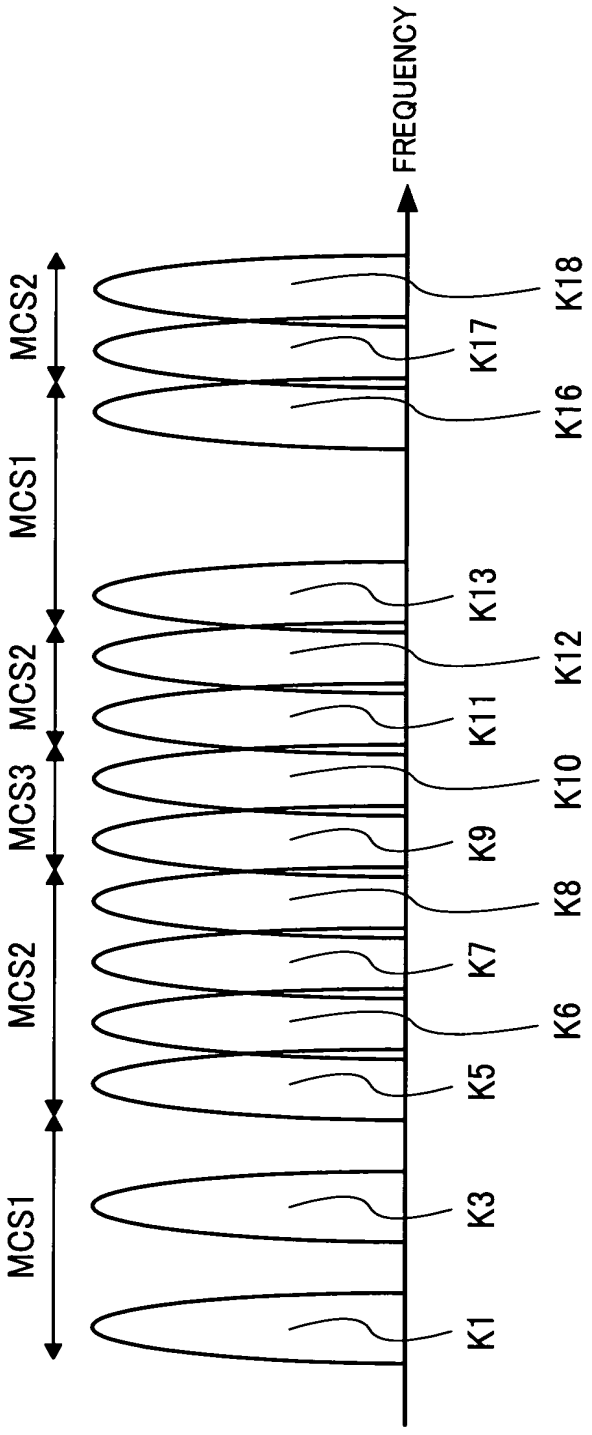
FREQUENCY
MCS1
MCS2
MCS3
MCS2
MCS1
MCS2
K1
K3
K5
K6
K7
K8
K9
K10
K11
K12
K13
K16
K17
K18

FIG.15

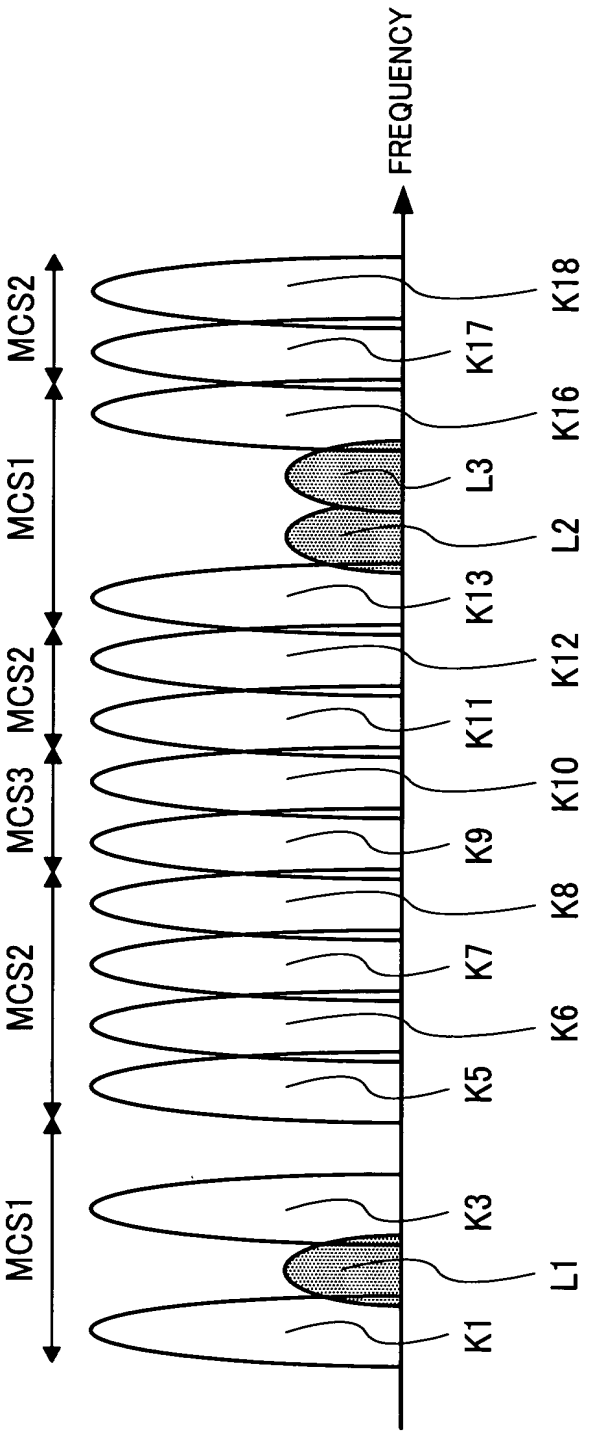
FREQUENCY
MCS1
MCS2
MCS3
MCS2
MCS1
MCS2
K1
L1
K3
K5
K6
K7
K8
K9
K10
K11
K12
K13
L2
L3
K16
K17
K18

FIG.16